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Assessing Export Platforms: The Case of Ghana

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FREE ZONES AND EXPORT GROWTH IN GHANA

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Abstract

Trade reforms during the 1980's transformed an autarkic Ghanaian economy into an internationally engaged one within five years, despite problems of administration. To compliment other export facilitation measures, in 1996, Ghana created export processing zones (EPZs), which offer a variety of tax, capital, and administrative benefits in an effort to support the manufacture and export of higher-value-added goods.[2] Despite slow progress in the enclave and often unreliable or underdeveloped infrastructure, EPZ incentives have attracted nearly 70 firms and more than $1 billion in foreign investment since their creation. Evidence from surveys of exporting firms that I conducted in February 1999 suggests that the instruments of export facilitation, including EPZs, can be developed more fully to augment Ghanaian exports. The data suggest, further, that infrastructure and the application of export-promoting incentives may exacerbate the problem of attracting producers of high-value-added manufactures for export.

While Ghanaian policymakers seem to have embraced the tenets of export-led growth, a lot has and has not happened since policymakers began responding to the macroeconomic and institutional constraints faced by exporting manufacturers since the early 1980's.

[2]The term "higher- (lower-) value-added manufactures" will take on two meanings throughout the paper. In the first instance, it will refer to manufactures which attract high (low) relative prices in the world market and to which the home country adds a fixed but small percentage of value, e.g., electronics (food processing and lower-end textiles). In the second instance, "higher-value-added manufacture" may refer to a manufacture that attracts either a high or low relative price in the world market, but a greater proportion of manufacturing takes place, or value is added, in the home country. The context given should guide the reader on the proper interpretation of the term.

Prior to 1983, Ghana's macroeconomic imbalances were legion but commonplace for African economies. Prices, unemployment, protection, and population growth were high, while savings, investment, trade growth, and overall economic growth were low. The Ghanaian innovation among African countries was to undertake and generally sustain macroeconomic adjustment for an appreciable period, as can be seen in Table 1. Table 2 shows that exports, total and manufactured, reversed from declining in the early 1980's. Surely, in more recent times, macroeconomic stabilization has been more elusive and has penalized exporters.

Macroeconomic stabilization or "getting prices right" was necessary for overall economic growth and for trade growth, as it has been in many cases. However, empirical evidence has shown that stability among the macroeconomic indicators is insufficient for sustained manufactured-export growth. Policies encouraging export growth have typically complimented macroeconomic stabilization policies in high-growth, export-led economies.[3] For most of the period since 1983, this observation was consistent with the Ghanaian experience.

[3] Radelet and Sachs (1999) is a recent empirical investigation of the link between export growth and economic growth.

Trade Reform Since 1983

Expanding the tradable sector relative to the nontradable sector in Ghana was a central component of the Economic Recovery Programme (ERP). Trade reforms transformed an autarkic Ghanaian economy into an internationally engaged one within five years: the share of exports of goods and services in GDP rose from under 2 percent in 1982 to nearly 17 percent by 1987, and the share of imports rose from 2 percent to 19 percent.[4] In terms of manufactured exports, Ghana was worse off in 1986, when much of the liberalization of international trade was instituted, than in 1966: manufactured exports' share in total exports was 3.9 percent in 1966 and 2.6 percent in 1986. Table 3 attests to the diversification of exports towards nontraditional exports since the mid-1990s, also encouraged by trade reform.

Trade reforms followed a series of gradual devaluations and other fiscal and monetary measures to stabilize the economy under the ERP. Besides reducing the parallel market premium from over 1000 percent to almost zero to improve the cedi's competitiveness, the major tenets of trade reform were near elimination of quantitative restrictions (QRs) and significant reduction in tariff levels, variation, and coverage. Indeed, according to Table 4, between 1985 and 1988, the Ghanaian trade regime went from one of "tight control" to one that was "open" by international standards.[5] Appendix A summarizes the

[4] A concise summary of these policy changes and their implications for trade appears in former Minister of Finance Kwesi Botchwey's essay on Ghana in the *Africa Competitiveness Report 1998*.
[5] Baah-Nuakoh and Teal, "Economic Reform and the Manufacturing Sector in Ghana," RPED Country Studies Series, August 1993.

current status of import tariffs and restrictions. Effective rates of protection, as reported in Table 5, fell substantially in all sectors between 1987 and 1990. The metal processing and machinery industries were the largest beneficiaries of tariff- and non-tariff-barrier elimination by this measure.

By 1993, the relative success of price and trade reforms had been demonstrated. According to a World Bank survey of manufacturers in 1992 and 1993, real output increased by 13 percent for all sectors and 38 percent for the exporting sector (namely wood) between 1991 and 1993.[6]

Limits of Trade Reform

Several major manufacturing surveys were conducted in the 1990's documented firm-level impediments to sustained export growth in Ghana. Stryker and Snow (1994) summarized from the literature on Ghanaian exports eight elements of the institutional environment limiting exporters' opportunities, particularly with respect to nontraditional (including manufactured) exports: 1) the general legal, regulatory, and judicial environment; 2) trade legislation, including import and export procedures; 3) investment incentives; 4) land legislation; 5) labor regulation; 6) financial markets, 7) foreign exchange, and 8) direct taxation. Baah-Nuakoh, et al. (1996) analyzed a 1993 survey of 150 manufacturing firms in Accra/Tema, Kumasi, Cape Coast, and Takoradi. The authors identified leading constraints for manufacturers in Ghana who export: 1)

[6] Francis Teal, "Does 'Getting Prices Right' Work? Micro Evidence from Ghana," RPED Discussion Paper No. 58, December 1995, Table 2.

availability of working capital, 2) the high price of foreign raw materials, 3) old machines and equipment, and 4) lack of an export agent.

While many other developing (the Dominican Republic, Malaysia, Mauritius, Singapore) and high-growth industrialized economies (Ireland) were embracing export processing zones as a means of overcoming economy-wide barriers to manufacturing export growth or of complimenting pre-existing measures, Ghana only adopted this strategy in earnest in 1996. The goal of this paper cannot be, then, to relate Ghanaian growth in exported manufactures to this export platform; this would clearly be premature. An alternative and more modest approach to understanding the role of export platforms in the Ghanaian economy is to assess, to the extent one can, the degree to which EPZs especially are mitigating the cost of exporting manufactures from Ghana. While duty drawbacks have been used to promote exports, they will not be the unit of analysis here; they proved more disincentive than incentive in enhancing export performance.

To gain such an understanding, this paper proceeds in four stages. First, a brief description of the previous export incentive (duty-drawback) system is given. Second, rules governing EPZs will be introduced. Third, a progress report will be given that reveals the types and quantity of firms that have been attracted to free zones and the evolution of the zones. Finally, firm-level data from surveys conducted in February 1999 will be presented.

The Duty Drawback System

As aforementioned, policies in the late 1980's and early 1990's were implemented to release manufacturers from the stranglehold of import-substitution-oriented trade restrictions, e.g., extensive negative lists prior to 1983 that directly discouraged imports and indirectly discouraged exports, and to encourage the manufacture of exports.[7] One of these export platforms was the duty drawback system.

Exporters receive a rebate of import duties and of sales and excise taxes paid on imported inputs, which applies to goods exported either subject to a manufacturing process or not. Firms must submit applications based on detailed, auditable declarations that duty and taxes were collected, inputs used, and goods in fact exported. Recently, the customs service eliminated a fraction of the transactions costs associated with using the duty drawback system: firms now receive a 100 percent rebate rather than 95 percent, which reflected a 5 percent tax on firms to cover administrative costs. Nonetheless, it remains a labyrinthine process that requires that many forms are completed and many signatures are obtained.

While paperwork may have been reduced, the duty drawback's usefulness in promoting exports is nonetheless undermined by two factors. First, only direct exporters, not their suppliers, are eligible for duty drawbacks. This policy discriminates against exporters' domestic suppliers, taxing them relative to imported inputs. Second, if the rebate is ever

[7] See "Trade Reform since 1983" section below for further elaboration of import-substitution policies and their dismantling.

received, it takes several months to process. Import duties are paid into the general government revenue fund; however, there initially existed no mechanism, or separate account, to repay firms filing applications and requiring rebates. That is, funds were irretrievable once lost in the system. In periods of higher inflation, the value of the rebate is eroded, and the resources spent completing the application yield an imperceptible return, if any.

Drawback this system certainly was. Delays and administrative costs associated with rebates were frequent and enormous. Under the USAID-sponsored Trade and Investment program (TIP) in the early 1990's, a separate fund was anticipated into which revenues from duty drawbacks were to be collected and redistributed as rebates. As of February 1999, it was not apparent that the fund foreseen had been instituted, and the system still seemed to work imperfectly.[8] Unlike in the past, exporters appeared to be refunded eventually, although it is reported to take months nonetheless.

Other means of duty-free admission of imported inputs are also available to exporters. Duty exemptions (case-by-case, intermediate goods only) and duty suspensions (bond posted for dutiable amount) exist but are plagued by problems associated with discretion, administration, and are, in the case of suspensions, rarely granted. In addition, temporary entry is occasionally used by importers. Certain imports are eligible for temporary admission and must be re-exported within three months. Imports can be in their state at

[8] There is conflicting evidence of whether or not the drawback system is still operating. A senior official in the Ministry of Trade and Industry said that the system lasted from 1993 to 1997. However, a firm received a rebate during the time of my survey. Most firms and the customs authorities spoke about it in the present tense. In the paper, I treat the system as an existing one.

the time of import or processed further. If goods imported under this mechanism are to be sold, the Customs and Excise Preventive Service must be notified and appropriate taxes collected before the sale. Bonded warehouses (bond posted for dutiable amount, customs officials on site) have been increasingly used in recent years. However, because of the significant customs inspection requirements, primarily medium-sized and large firms employ this method of duty-free importation. Export processing zones, or free zones, appear to address or circumvent many of the institutional problems associated with the duty drawback, exemption, and suspension systems and, more generally, with exporting manufactures from Ghana.

Ghana Free Zones

The Ghana Free Zones Board began operating in late 1996, although the Free Zone Act was promulgated in 1995. Operators in free zones can be licensed as single-factory zones with no geographic restrictions (effectively bonded warehouses) and in free zone enclaves (classic geographically defined EPZs), which have been delineated but not yet developed.[9]

Since their inception, the Free Zones have been located in the vicinity of the major ports, namely Accra-Tema and Takoradi. They comprise a parcel of land in the Greater Accra Region (near the Tema steelworks), in Mpintsin (near Takoradi), in Ashiem (near Takoradi), and at Kotoka International Airport (Accra). A map of Ghana appears in Appendix B.

The incentives offered by the free zones to firms range from standard to generous. Firms are totally exempt from direct and indirect taxes and duties on imported inputs and exported output. Zone enterprises, including developers, are exempt from profit taxes for the first 10 years, after which a profit tax of no more than 8 percent applies. Firms are also exempt from payment of withholding taxes from dividends from free zone investments.

Enterprises in the free zones are not subject to import licensing requirements, and streamlined customs procedures apply. Up to 30 percent of production may be sold on the domestic market. For both free-zone developers and entrepreneurs, ownership and investment regulations apply equally to nationals and foreigners.[10] There are no restrictions on repatriation of dividends or profits, payments for foreign loan servicing, payments of fees related to technology transfer agreements, remittance of proceeds from the sale of a portion of a free zone investment, and operation of a foreign-currency account in a bank in Ghana.

While these incentives appear generally attractive, it is an open question whether they have, in fact, induced a positive export supply response. To attempt to measure this, I conducted interviews in Accra and in nearby Tema in February 1999, the design and results of which I describe in the next section.

[9] The Tema Free Zone is scheduled to begin operating at the end of 1999.

Evolution of the Free Zones

Incentives offered by the free zones have attracted 65 firms, 38 of which are already operating.[11] Forty-three are manufacturing firms, four are commercial (trading) firms, and four provide support services, such as data processing and warehousing, to the enclave. Two oil refiners and a mining company have also been granted EPZ status. This represents an increase of 76 percent since the end of 1997 when 32 manufacturers and 5 commercial operators held free zone licenses. As is reported in Table 6, most firms produce relatively low-value-added goods, relying heavily on primary commodities, such as wood, metal, and petroleum. Petroleum exports dominated zone exports between 1996 and 1997: $350 million of the $550 million in exports was generated by Scott Haig, an oil refinery. Missing from the distribution of firms is, for example, electronics manufacturers, who at one point in history produced for the Ghanaian market, and other producers of high-value-added products. I will return to this momentarily.

Roughly 30 percent of firms are owned by Ghanaians. The origins of foreign investment are diverse: China, Germany, India, Lebanon, Malaysia, the Netherlands, and the United Arab Emirates. The chief source of the $1 billion in investment capital in the zones is also Scott Haig. If this refinery is excluded, investment in the zone was $200 million at

[10] Equal treatment of Ghanaian nationals and foreign citizens is significant. Until recently, legislation and practice have traditionally favored Ghanaian nationals.

[11] A number of enterprises were established and operating before free zones began operating in 1996. They have applied for and been granted single-factory zone status in their pre-existing locations.

the end of 1997. A number of firms have created jobs in the zones such that employment reached 3500 people by the end of 1997.

Development of the enclaves has been slow but consistent. A contract has been negotiated with the Business Focus Group of Malaysia to develop the Tema EPZ on 680 acres acquired by the Free Zones Board. Land, roughly 2200 acres, is being acquired in the Western Region in Sekondi to be developed as a free zone, and land in the Central, Volta, and Dangbe East areas has been offered for such. The ports of Tema and Takoradi and the Kotoka International Airport have already been declared free zones. Infrastructure development associated with the zones, such as road building, has been particularly slow according to a number of operators.

Unlike other African countries, such as Egypt and Tunisia, free-zone incentives are not extended to suppliers of inputs to free-zone firms in Ghana. For example, there is only one packaging firm (woven sacks) with EPZ status that would supply predominately EPZ firms. Domestic production of inputs is, thus, discriminated against, and backward linkage opportunities are lost as a result. Therefore, firms requiring simple or more complex inputs they might otherwise obtain at lower cost, such as electronics firms[12], are penalized by seeking domestic suppliers that do not receive the favorable treatment that their competitors in Egypt, Tunisia, Singapore, and elsewhere receive. Also, in addition to including more firms on the EPZ list, one might reconsider the presence of some firms

[12] When protection was high in Ghana, Sanyo was producing for the Ghanaian market and shipping the residual to neighboring countries. Now that consumer products companies do not enjoy such protection, no such firm has deemed it profitable to produce and to export electronics in Ghana. I mentioned this only to suggest that generally lower-value-added production was taking place in the export sector.

on the list. Bonded warehouses are among the firms with free-zone status and are traditionally used to facilitate the import and export of goods. However, it appears that many of the products housed in these warehouses or shops are not capital or intermediate goods but consumer goods, jewelry for example, destined partly for the domestic market and largely for re-export (if 70 percent must be exported). Neither policy seems to be optimal in supporting the manufacture and sale of higher-value-added goods from Ghana.

Now that we have seen how zones have evolved in the aggregate, a closer look at exporting firms' assessments of the zones and export facilitation policies, more broadly, is warranted.

The 1999 Survey of Exporting Firms

Among the operators in the free zones, a small number were chosen to be interviewed. The firms were not selected randomly but based on access, sector, and availability. Nonetheless, given the distribution of firms by size and sector, the sample appears largely representative. CEOs, CFOs, and export or production managers of seven firms were interviewed for approximately one hour on production and location decisions, ownership, incentives, and export facilitation policies and infrastructure.[13] The sole responses that were consistently obtained involved infrastructure and export facilitation policies due to the time constraint. (If completed were completed, the interview lasted 1.5 to 2 hours in most cases.)

[13] Others, such as government officials (customs, free zones, Ministry of Trade and Industry, Ghana Export Promotion Council) and heads of non-governmental organizations (Private Enterprise Foundation, Federal

Characteristics of firms in the sample appear in Table 7. They range in size from small, with 22 employees, to large, with 1373 employees.[14] Most firms export 95 percent or more of output; one firm exports as little as17 percent.[15] Exports reach a large part of the globe: North America, Europe, West and Southern Africa, the Middle East, and India. All but two firms were at least partially Ghanaian-owned. Managers of partly foreign-owned firms, consistent with other evidence from international firms operating in Ghana, suggested that securing a Ghanaian partner was a necessary feature of operating in Ghana. Managing licensing procedures, some report, is one reason for retaining a national partner, at least initially.

Like firms interviewed in Tunisia and Egypt, for example, managers were extremely reluctant to surrender cost data. Nonetheless, half of firms provided some insight into their cost structures, including an aluminum processor, two food processors, and a garment manufacturer. Labor constitutes 5 to 10 percent of production costs for all but the garment maker for whom wages represented 25 percent of production costs (including social security contributions, yearly bonuses, and transportation that is paid if targets are met). These data are consistent with the discussion of declining wages in the manufacturing sector above. No firm commented that labor is expensive or that labor productivity was low in Ghana. (See Appendix C for a discussion of labor in Ghana.)

Association of Ghana Exporters), were also interviewed for this project. Rather than being reported here, their comments appear where appropriate.

[14] They vary in turnover, as well. The smallest (and youngest) firm had sales in 1997 of approximately in the tens of thousands of dollars, while the largest had sales in the tens of millions. Most firms were reluctant to report turnover precisely. Two medium-sized firms, between 100 and 500 employees, had sales of $900,000 and $750,000.

For those who responded, transportation costs were minimal, representing up to 5 percent of production costs. This proportion is credible, since most firms are located at the Tema port which processes both imported inputs and exported output and since domestic suppliers are largely in near-by Accra. Firms vary greatly in their use of domestic inputs: some import from nearly half up to 90 percent of inputs, others as little as 25 percent.

Rankings assigned by firms to infrastructure characteristics useful in supporting export manufactures appear in Table 8. While this is a small sample, the rankings are consistent with the recent literature on export manufacturing in Ghana and with interviews of those involved in international trade in Ghana. The rankings are discussed in turn.

Customs Administration

Most firms (and others interviewed) ranked customs administration as average, which was a compromise between poor and above average scores. Operators noted an asymmetry between import clearance times and export clearance times: imports generally take one to three weeks to clear, while exports take a maximum of four hours.[16] Procedures and attitudes concerning imported products appear not to have changed as dramatically as for exported goods.

[15] It is still unclear why this firm, which exports less than 50 percent of its production, was allowed to operate as a single-factory EPZ.

[16] Evidence from freight forwarders in 1994 cited in Stryker and Snow (1994) suggests that import clearance times have changed little in the last five years.

Both firm managers and customs officials noted that procedures for export clearance had been the focus of USAID'S Trade and Investment Promotion (TIP) program and, as a result, the number of export-reporting and –inspection procedures has been significantly reduced. For example, customs agents are implementing random searches of exported goods rather than more cumbersome universal searches. International evidence of greater efficiency presented through the TIP program persuaded customs officials to adopt this technology in the early 1990's. Further, once export taxes were lifted, exports were no longer a source of government revenue, and customs officials no longer had an incentive to expend considerable inspection resources on exported goods.

On the import side, cumbersome procedures have become less cumbersome, rather than importer- (exporter-) friendly. The complexity of imports and customs agents' lack of familiarity with them appears to hamper rapid inspection. For this reason, capital and intermediate goods are often at risk of delayed clearance.

More importantly, no export taxes and the reduction of customs duties have narrowed the base for taxing international trade. Therefore, customs officials and agents are under increasing pressure to maintain, if not augment, customs revenue. With little exception, most exporters in the sample believed that, while well-trained, customs officials faced procedural and political constraints in inspecting imports, unlike exports, and that these factors also constrained efficacy in import processing.[17] A computerization experiment

[17] According to the *Africa Competitiveness Report 1998*, Ghanaian firms generally believe that civil servants are very capable. Ghana ranks near the top of the index measuring confidence in the abilities of civil servants.

with import procedures was attempted but never fully adopted earlier this decade. Customs officials are currently seeking funding to fully computerize their operations.[18]

Utilities

Most firms complained that utilities providers were unprepared for and unresponsive to the 1998 drought, which halted for months the operation of the Akosombo dam's electricity plant. Unexpectedly, many firms had to purchase additional generators to maintain production schedules. The general sentiment was that the water and electricity cost, delivery, and service were more than adequate under normal circumstances and poor in the presence of unforeseen circumstances.

Communications

The telecommunications sector has developed rapidly in Ghana in the last three years. The privatization of Ghana Telecom was the catalyst for this juggernaut. The number of Internet service providers (ISPs) and telecenters has increased markedly in that same period. However, firms argued that privatization and the existence of more ISPs were not sufficient to connect exporters to their international buyers and suppliers quickly,

[18] It was reported by customs officials that resistance by customs agents to computerization, which may have limited customs agents' influence and bribe-taking opportunities, aborted an attempt in the early 1990's at adopting a system of computer-based import inspection. The officials did not report, however, that attitudes or incentives had changed appreciably such that the current computerization campaign might be taken more seriously and effect the desired change in agents' productivity.

reliably, and cheaply.[19] Further opening to competition in the telecoms sector and more experience of young ISPs in customer service seemed to be the consensus remedy for making this communications infrastructure more accommodating to exporters.

Zone Administration

The Free Zones Board was given high marks by firms in the sample. Whereas, foreign investment promotion agencies in other African countries, such as Tunisia and Egypt, seem to take the lead in resolving problems of firms in export zones; the board plays an advocacy role for these firms in Ghana. Managers admit; nonetheless that the Board is constrained by bureaucratic tendencies of the government agencies it coordinates.[20]

Transportation

Most managers believed that the Ghanaian transportation system was at least above average. Good road networks between the Tema port and Accra, adequate numbers of ships over regular intervals, and frequent international flights were reported to considerably enhance the exporting environment. I found these scores exaggerated in light of other evidence, suggesting that firm responses were largely a function of their strategic location for engaging in international trade. Much of the road linking Accra and Takoradi is not in as good shape as the newer ones between Accra and Tema, the area where all the firms in the sample were located. Most of the railroad network connects the

[19] The *ACR 1998* reports that Ghana ranks 16 out of 22 African countries in costliness of Internet access.
[20] These scores might be somewhat inflated. The Free Zones Board arranged 5 of the 7 firm interviews. Firms interviewed independent of the Board gave it lower scores than the average. These firms were also

port of Takoradi with the resource-rich centers in the interior. Other areas of the country are excluded from this network, which could provide a low-cost means of transporting raw materials to export manufacturers elsewhere in Ghana and finished products from them to Tema where most manufactured exports are shipped from. Evidence from the World Economic Forum and HIID corroborate this observation: Ghana received one of the lowest scores of any Africa country concerning rail infrastructure, 18 of 22.[21]

Further Observations

As important as what was included in responses was what was excluded. Two important features of EPZ firms are worth mentioning here.

First, labor-supply conditions in Ghana's EPZs seem anomalous with respect to other African countries. Unlike EPZs in Tunisia, Egypt, and, indeed, most other countries with EPZs, the majority of workers are male, not female. Young men are the primary beneficiaries of jobs, with its attendant benefits, in Ghana. With little exception, women held support-staff positions, including secretarial and food service (canteen) positions. Since these are among the highest-paying jobs for low-skilled workers in the economy, we should expect to see a sustained, if not increasing, gap in wages, skills, job mobility, and related opportunities between young Ghanaian men and women, all else being equal.

relatively larger, well-known ones and likely required the services of an advocate less than smaller, less established ones.

[21] *ACR 1998*.

Also, contrary to the experience of other EPZ firms I have studied, managers, in general, did not identify problems associated with labor scarcity. The interviews left me with the impression that the supply of labor in each segment of the market (low-skilled, skilled, management) was infinitely elastic. Certainly, Ghanaian labor is relatively cheap: in 1990, monthly wage rates for nonagricultural workers were $105 in Ghana, $134 in Kenya, $219 in Mauritius, $271 in Costa Rica, $639 in South Africa, and $1731 in Canada.[22] Labor shortages also do not feature prominently in other studies of manufactured exports in Ghana.[23] Yet, studies in other developing countries' EPZs suggest that lack of skilled labor suitable for these relatively demanding, internationally competitive jobs is of major concern to exporters. I gleaned evidence of skilled-, or more accurately disciplined-, labor problems from a plant visit. One firm posted a very elaborate scheme of bonuses that were a function of monthly attendance and the number of items assembled in a given period (hour, day). It was an obvious incentive to combat absenteeism and to improve worker productivity. Of course, I do not wish to suggest that a single firm's constraints are representative of this sample or of the population. However, missing conversations about labor-supply issues were obvious and could not also be overlooked here.

[22] Dirk Stryker and Christopher Shaw, "Costs and Benefits of Eliminating Institutional Constraints on the Expansion of Nontraditional Exports," Associates for International Resources and Development, October 1994, p.47. Data for Ghana are for 1988. While the data may have changed since the period of reporting, the relative positions of these countries have remained relatively stable.

[23] Labor issues receive little attention in Stryker and Shaw, which focuses on cumbersome labor regulations that make retrenchment difficult, and none in Jebuni, et al. The labor dispute between competing labor unions that ultimately closed the doors of the largest garment producer in Ghana, Volta Garments, was also not mentioned by enterprise managers or government officials. Yet, it was one of the biggest commercial stories in Ghana last year.

Second, the cedi appreciated in real terms by at least 20 percent in the last half of 1998. The overvaluation of the cedi subsidizes importers and taxes exporters. It was odd that such a large and rapid appreciation of the exchange rate went consistently unmentioned by firms buying inputs and selling output on the world market. In contrast, firms surveyed for the *ACR 1998* reported that volatility of the exchange rate was a major constraint of the Ghanaian business environment: Ghana was ranked 18 out of 22 in terms of exchange-rate volatility. Again, this evidence corroborates the earlier sentiment that significant binding constraints to manufacturers who export may have not have been articulated through the survey instrument.

Conclusion

In fact, it would be premature to conclude anything meaningful about the EPZ experience in Ghana. The framework has just been put in place, firms are just beginning to operate with EPZ status, and the Tema EPZ has not yet been constructed. Early empirical evidence suggests that this export platform, coupled with bonded warehouses, is superior to the duty drawback, exemption, and suspension systems in promoting exports. On the other hand, the evidence so far suggests that a number of prohibitive factors linger as one export facilitation policy is exchanged for another, such as time spent obtaining permits or obtaining customs clearance for imports. More work should be done systematically to ascertain whether EPZs are a viable part of Ghana's strategy to become the "Gateway to (and with exports, from) Africa."

Appendix A: Current Status of Import Tariffs and Quantitative Restrictions

Nearly all imports are subject to import duties and 10 percent VAT. The schedule of import tariffs as of 1998 is: agricultural and educational materials (and imports destined for production in export processing zones), no duty; other raw materials and capital goods, 10 percent ad valorem; all other goods, 25 percent ad valorem. Sixteen categories of manufactured imports are more heavily taxed than other imports, while other prescribed categories attract less customs duty.[24] Changes in effective rates of protection appear in Table 5.

The import license system was abolished in 1989. Yet, a permit or certificate is required for, among other things, drugs, all communication equipment, arms and ammunition, and live plants and animals. The list of restricted imports is relatively short. Minimal import labeling standards were passed in 1992 and continue to be enforced. Ghana has no import quotas. A number of items are restricted or forbidden as exports, including cocoa, military hardware, and timber products.

[24]U.S. Embassy Accra, FY 1999 Country Commercial Guide: Ghana," July 1998, http://www.state.gov/www/about_…guides/1999/africa/ghana99.html, pp. 18-20. Currently, ad valorem taxes are calculated using import values determined by the Brussels Definition of Value; by 2000, import values will be assessed according to the Customs Valuation Code, which is the WTO method. Price verification is contracted to four pre-shipment inspection agencies by the Government.

Appendix B: Map of Ghana

PURPOSELY DELETED DUE TO FILE TRANSFER PROBLEMS

PLEASE REFER TO ANY OTHER MAP OF GHANA

Appendix C: Labor: Wages, Productivity and Conditions in Ghana

Manufacturing Wages

The data in Table 2 introduce a conundrum, albeit a common one for sub-Saharan Africa.[25] Prior to the introduction of the Economic Reform Program (ERP) in April 1983, real wages in the manufacturing sector were declining precipitously. Between 1980 and 1983, wages declined on average by 20 percent each year in real terms. As predicted by theory, a correction in the price structure that more accurately reflects the relative scarcity of factors should increase wages if labor productivity rises. In a reversal of the trend at the beginning of the decade, real wages more than tripled between 1984 and 1989. Yet, after peaking in 1989, manufacturing wages have returned to their 1981 level. A number of other African countries have witnessed a similar decline in the last two decades, and, as in the Ghanaian case, no one hypothesis has explained definitively cross-section nor time-series wage phenomena. It has been hypothesized that labor markets are uncompetitive such that wage differentials exist within skill categories. Also, it has been shown that Ghanaian labor markets are competitive in the sense that wages are consistent with the capital-labor ratio.[26] Evidence from the three-year panel of RPED surveys suggests that both neither theory can be rejected in Ghana. Teal (1995) finds that real wages are falling, because only replacement of capital equipment, rather than increases, has occurred over the last decade. (Indeed, the African Centre for the Study of

[25] In fact, not all data show a consistent recovery of real wages between 1983 and 1989. The RPED series, which includes all production workers and not just unskilled workers (Table 9), reports a real decline of approximately 31 percent between 1985 and 1989.

[26] Francis Teal, "Real Wages and the Demand for Labor in Ghana's Manufacturing Sector," RPED Discussion Paper No. 51, October 1995.

African economies estimates that average rates of investment are low, roughly 13 percent for most firms studied.[27]) The decline in real wages reflects a constant capital stock with more units of labor added to it and flexibility in the labor market. He also finds that institutional arrangements, namely rent sharing, determine wage differentials and keep the Ghanaian labor market from being completely competitive.

Limited investment in labor-intensive manufacturing has been further identified in the export sector as insufficient foreign investment. The Center for African Studies refers to Ghana's "ambivalence" towards foreign investment, and a World Bank study suggests that the most significant productivity gains in firms in Ghana, Kenya, and Zimbabwe were found at firms with not simply some participation by foreign firms but majority ownership by foreign firms.[28]

Labor

Labor restrictions have not been identified in the literature nor in my survey as impeding growth in labor-intensive manufactures. The authorities set a minimum wage, but actual wages have been found to be higher in larger manufacturing firms and lower in smaller ones.[29] Extraordinary labor conditions have also not been cited by any source as a dominant feature of the market for labor in manufacturing.

[27] Centre for the Study of African Economies, "Research Summary 1997," p. 32.
[28] World Bank, "The Effects of Foreign Ownership in Africa: Evidence from Ghana, Kenya, and Zimbabwe," January 1998, http://www.worldbank.org/aftdr/findings/english/find102.htm
[29] See Teal (1995).

Labor productivity has received more attention than the two above concerns of the labor market. While Ghanaian labor appears inexpensive relative to other African and developing countries, its actual cost may be large once labor productivity is controlled for. My factory visits in February suggest that inducing adequate effort is costly for export-manufacture firms in Ghana. One garment manufacturer, as I mentioned in the text, devised a multidimensional incentive system based on daily attendance and daily productivity. Such a system must impose high monitoring costs on the firm. More and better education and training have been demonstrated to raise productivity and, hence, wages. They would also reduce unit labor costs, including monitoring costs, of firms.[30]

[30] In general, the RPED studies reveal less concern about labor productivity than other studies.

Table 1. Changes in Output Growth, Inflation Rates, and Exchange Rates in Ghana, 1981-1998

Year	Real GDP (3-yr moving Average, %)	Real Manufacturing GDP (3-yr moving Average, %)	CPI (annual average)	RER
1981	-1.5	-13.2	na	0.5
1982	-5.0	-16.0	na	0.4
1983	-1.2	-6.7	na	0.6
1984	3.0	8.3	na	1.7
1985	6.2	13.4	10.4	2.4
1986	5.0	13.0	24.6	3.0
1987	5.2	8.5	39.8	4.1
1988	5.2	5.0	31.4	4.0
1989	4.6	3.8	25.2	4.5
1990	4.6	2.5	37.2	4.1
1991	4.2	3.2	18.0	4.0
1992	4.1	2.0	10.1	4.2
1993	5.0	1.3	25.0	5.1
1994	3.3	15.9	24.9	-18
1995	4.0	8.6	59.5	14.9
1996	4.6	4.6	46.6	12.2
1997	4.2	na	27.9	7.2
1998	4.6	na	19.3	na

Source: Baah-Nuakoh, et al. (1996), IMF (1998), IMF (1:1999), IMF (2:1999)

Note: For years 1994 to 1998, all averages are annual. For years 1994 to 1997, changes in the real effective exchange rate replace the real exchange rate. The 1993 change in GDP is an annual average. The real exchange rate is defined here as the CPI scaled by the nominal (cedi/$) exchange rate.

Table 2. Manufacturing Output and Exports, Ghana, 1981-1998

Year	Manufacturing Exports (US$, millions)	Total Exports (US$, millions)	Manufacturing Value Added (1975 constant cedis, millions)	Manufacturing Exports/ Total Exports (percent)	Non-Traditional Exports/ Manufactured Exports (percent)
1981	33.3	948.9	464	35.7	47.1
1982	231.2	792.9	369	29.1	51
1983	154.4	1157.8	350	13.3	71.5
1984	59.2	535.6	385	11.1	75.7
1985	88.3	610.1	460.1	14.5	62
1986	134.1	859.7	510.5	15.6	17.3
1987	135.3	780.6	561.6	17.3	31.4
1988	247.3	826.3	590	29.9	67.6
1989	na	1018.5	593.5	na	63.7
1990	160.3	898.8	628.4	17.9	61.5
1991	250.3	997.7	635	25.1	23.1
1992	221.9	986.3	657	22.5	10.5
1993	na	1050.9	684	na	na
1994	na	1227	694	na	na
1995	na	1431	706	na	11.2
1996	na	1571	725	na	na
1997	na	1492	na	na	14.3
1998	na	1745	na	na	16.9

Source: Baah-Nuakoh (1996), IMF (1998), IMF (1:1999)

Note: Traditional manufactured exports are cocoa products and sawn wood. Non-traditional manufactured exports are veneers, plywood, aluminium, non-ferrous metals, clothing, and furniture and furniture parts.

Table 3. Value of Non-Traditional Exports from Ghana, Selected Years and Manufactured Products (Current US$, thousands)

Sector	1991	1995	1997	1998
Agricultural (including processed food)	33,929.90	27,383.80	33,717.00	59,158.80
Non-Agricultural	28,621.20	132,281.80	179,097.00	236,201.60
Garments	39.50	1,702.90	580.00	4,757.10
Other textiles (including kente and batik)	237.70	1,804.30	911.80	1,019.30
Footwear	27.20	25.50	184.60	233.00
Furniture	3,580.20	4,295.10	5,220.00	7,009.50
Aluminum products	5,474.90	7,653.80	6,126.80	10,068.80
TOTAL	62, 551.10	159,665.60	212,815.70	295,360.40

Source: Ghana Export Promotion Council; Ghana Ministry of Trade and Industry, Customs, Excise, and Preventive Service, and Ghana Trade and Investment Programme

Note: 1991 data include slippers in footwear; clothing, briefs, and shirts in garments; and batik, kente, scarves, and baby napkins in other textiles. 1995 data include batik, kente, cotton fabrics, and napkins in other textiles. 1997 data include only cotton fabrics in other textiles. 1998 data include slippers in footwear; briefs, shirts, children's wear, and unclassified items in garments; and batik, kente, scarves, cotton fabrics and napkins in other textiles. 1991 and 1995 data are for January to December.

1997 and 1998 data are for January to September. Non-traditional exports are products not historically exported by Ghana, including unprocessed, semi-processed, and processed commodities.

Table 4. Ghana's Trade Reform Program, 1985-1998

Year	Tariffs and Surcharges		Quantitative Restrictions		IMF Class
	Statutory Tariff (%)	Charges (%)	Main Measure	Coverage (% of total imports)	
1985	0-100	10-40	Nonauto licensing	100	"Tight Control"
1986*	Reduction of maximum and rationalization		Virtual elimation of QRs via access to forex auction		
1988	0-25	0-23	None	0	"Open"
1998	0-25	na	None	0	"Open"

*Year reform program started

Source: Baah-Nuakoh and Teal, "Economic Reform and the Manufacturing Sector in Ghana," RPED, August 1993 and *IMF Annual Report on Exchange Arrangements and Exchange Restrictions*, various issues

Note: The range of tariffs and surcharges is given. Surcharges were not reported if they applied equally to domestic and imported goods. QRs include value limitations on imports through foreign exchange allocation or by the requirement that importers provide their own foreign exchange.

Table 5. Effective Rates of Protection in Ghana, 1987-1990 (Percent)

Sector	1987	1990	Percent Change
Food processing	81	46	-43.2
Garments	150	54	-64.0
Wood products	59	41	-30.5
Furniture	108	39	-63.9
Metal processing	152	25	-83.6
Machinery	101	11	-89.1

Source: Louis Berger and Plan Consult (1991)

Table 6. Selected Free Zone Company Data, Ghana, 1999

Name	Production	Value of Exports ($)	Employment (Est.)
Business Focus Gh. LTD.	Enclave Development		
Axis GH LTD.	Enclave Development	na	na
Ghana Biscuits Company LTD.	Biscuit	na	na
Carson Products	Beauty Products, Dark & Lovely	1,600,000	22
Rainbow Gloves LTD.	Tective Clothing Gloves	1,158,000	66
Great Imperial CO LTD.	Metal Fabrication	578,000	105
Scanstyle MIM	Product Furniture	6,134,000	583
Poku Transport & Sawmillers	Furniture	2,000,000	163
Tatcol Sagr	Commercial	7,000,000	89
Pioneer Foods Cannery	Food Processing	15,457,000	769
Nourex LTD.	Commercial Transhipment	na	na
Vehrad Trading	Commercial Transhipment	500,000	32
Blue Skies Products	Receiving, Cutting & Packaging	2,093,000	116
Comet GH LTD.	Commercial, Duty Free Shops	2,400,000	63
Scott Haig & Co.	Oil Refinery	350,000,000	220
Weaveplast LTD.	Polypropylene Woven Sacks	600,000	67
Super Retreading	Retreaded Tires	175,000	68
Delta Foods	Warehousing, Manufacturing	58,000,000	49
Sojafric Industries LTD.	Manufacture Gas Cylinders	1,000,000	na
Machined Wood LTD.	Laminated Wood Products	1,800,000	122
Crystal Auto LTD.	Oil, Fuel & Air Filter	420,000	75
Automotive Springs LTD.	Manufacturing of Spare Parts	na	na
Calf Cocoa INT. CO.	Production of Cocoa Products	13,195,000	154
Ghana Apparel LTD.	Garments & Wearing Apparels	7,200,000	323
Contrade Mygum LTD.	Cement Bagging	25,900,000	123
Contrade Mygum Handles GMBH. LTD.	Commercial	2,300,000	30
Volta Garments	Garments & Wearing Apparels	540,000	140
AGS World-Wide Movers	Packing Materials	440,000	10
Galeto INT. Group LTD.	Complete Finished Jewelry, etc.	8,375,202	117
Ghana Asphalt CO. LTD.	Manufacture of Bitumen	14,000,000	46
West Africa Fragrance LTD.	Manufacture of Cosmetics	500,000	32
France Agro LTD.	Fish Processing	11,992,800	337
Wienco Fibre LTD.	Coconut Fibres Extracation	1,800,000	63
Pharmadex GH. LTD.	Pharmaceuticals	1,087,000	212
Lakshimi	Manufacture Garments	1,296,000	137
Benabbe CO.	Manufacturing of Furniture for Export	72,000	10
West Africa Mills CO. LTD.	Cocoa Processing	1,923,000	36
Afripa Telecom	Telecommunications	700,000	5
Deadline LTD.	Garment Manufacturing	28,960	23
Standard Wood Processing LTD.	Timber Processing	102,280	30

Source: *Ghana 100 Report 1999*

Table 7. Characteristics of Survey Firms

Enterprise	Sector	Exports/ Production (percent)	Destination of Exports	Employees	Ownership (percent Ghanaian)
1	Food processing	0.95	West Africa, Southern Africa, Middle East	165	0.50
2	Food processing	1.00	US, Canada, Germany	50	1.00
3	Beauty products	0.70	West Africa	22	0.00
4	Fish processing	0.95	US	1373	0.00
5	Aluminum products	0.17	US	430	1.00
6	Auto filter production	1.00	West Africa, Europe India	31	0.45
7	Garments	1.00	US	452	>0.00

Source: Surveys, Company Annual Reports, Ghana Free Zones Board, Ghana Investment Promotion Corporation

Table 8. Rankings of Infrastructure and Export Policies by Firms, Ghana, 1999

Enterprise	Sector	Customs Administration	Utilities	Communications	Zone Adm-inistration	Transportation
1	Food processing	2	2	3	4	4
2	Food processing	3	2	2	4	3
3	Beauty products	2.5	NA	1	3.5	4
4	Fish processing	2	2	3	2	3.5
5	Aluminum products	2	3	2	3	2.5
6	Auto filter production	2	3	3	4	3
7	Garments	2	3	3	3	4
	AVERAGE	2.2	2.2	2.4	3.4	3.4

Source: Author's interviews, February 1999
Key: 1=poor; 2=average; 3=above average; 4=excellent

Table 9. Nominal and Real Earnings in the Ghanaian Manufacturing Sector, 1980-1996

Year	Nominal Earnings (Cedis)	Real Earnings
1980	552	8740
1981	689	5039
1982	787	4706
1983	1312	3520
1984	3441	6610
1985	5059	8811
1986	8787	12286
1987	15276	15276
1988	21411	16300
1989	36793	22368
1990	45045	19951
1991	34226	12839
1992	20571	7014
1993	25536	6968
1994	30307	6622
1995	44003	6028
1996	57586	5417

Sources: Yearbook of Labor Statistics, and Centre for the Study of African Economies (1997)
Notes: 1. Real earnings are in 1987 cedis.
2. Data for the years 1992-1996 are from Centre for the Study of African Economies (1997). The nominal wages for these years refer to the wages of unskilled workers.

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